NHDES

The State of New Hampshire Department of Environmental Services



AGGREGATED PRECIPITATION DATA for N.H. DROUGHT MANAGEMENT AREAS

			Deviation					
	Actual	Normal	from	Percent				
	Rainfall	Rainfall	Normal	of				
	(inches)	(inches)	(inches)	Normal				
Coastal Drainage: R	ockingham, Straffo	ord counties						
four month	14.32	16.25	-1.93	88%				
six month	23.69	23.64	0.04	100%				
nine month	40.96	35.62	5.34	115%				
twelve month	48.73	45.28	3.45	108%				
Southern Interior: Be	lknap, Hillsboroug	h, Merrimack coun	ties					
four month	12.90	15.45	-2.56	83%				
six month	20.86	23.07	-2.21	90%				
nine month	36.00	34.23	1.77	105%				
twelve month	43.27	43.91	-0.64	99%				
South Western: Ches								
four month	12.95	15.17	-2.22	85%				
six month	21.06	22.97	-1.91	92%				
nine month	32.62	33.95	-1.33	96%				
twelve month	39.75	43.55	-3.80	91%				
White Mountain: Car	roll, Grafton count	ies						
four month	16.84	16.83	0.00	100%				
six month	26.00	25.33	0.68	103%				
nine month	38.93	37.12	1.81	105%				
twelve month	46.73	46.00	0.73	102%				
North Country: Coos	county							
four month	18.90	17.32	1.58	109%				
six month	27.03	26.46	0.57	102%				
nine month	Z1.UU							
mne monu	41.49	37.78	3.71	110%				

four month period : August 2007 - November 2007 six month period : June 2007 - November 2007 nine month period : March 2007 - November 2007 twelve month period: December 2006 - November 2007

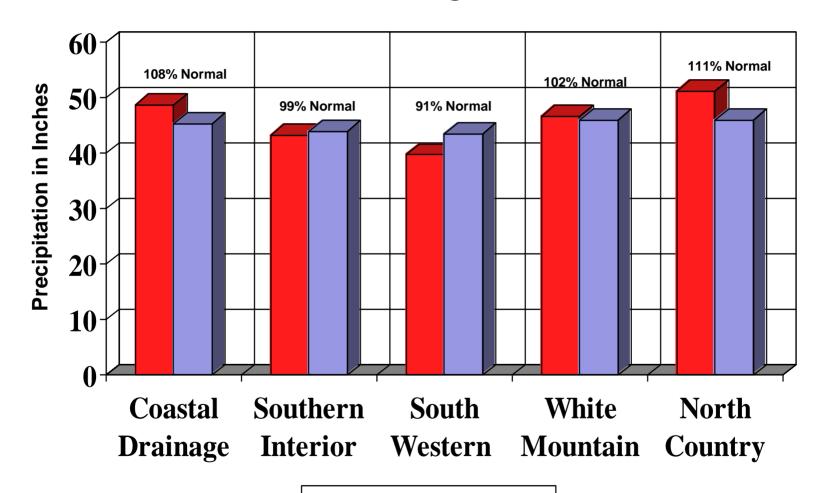
Source: Northeast River Forecast Center, NH Des Dam Bureau

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-3503 • Fax: (603) 271-7894 • TDD Access: Relay NH 1-800-735-2964

DES Web site: www.des.nh.gov

TWELVE MONTH AGGREGATED PRECIPITATION DATA for N.H. DROUGHT MANAGEMENT AREAS from December 2006 through November 2007



🗖 Actual 🔲 Normal



MONTHLY PRECIPITATION DATA FOR N.H COUNTIES

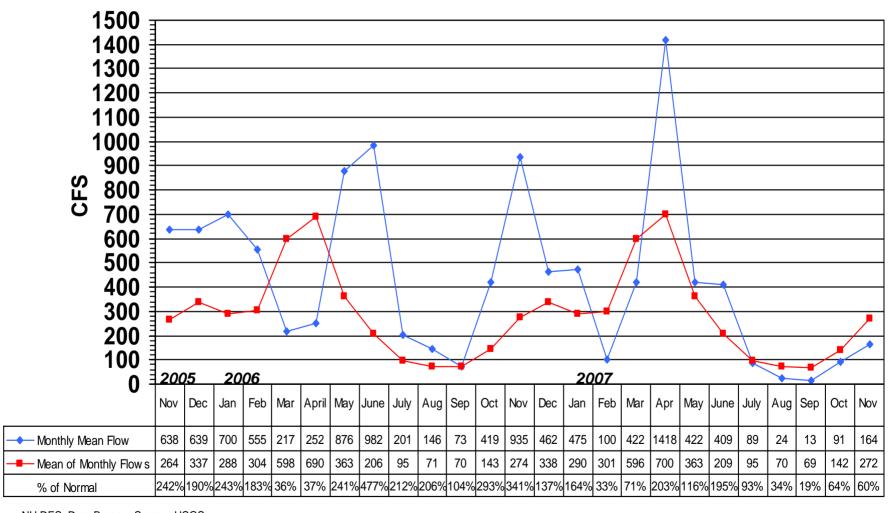
				ivices									
		2006	2007										
		DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV
Coastal drainage	<u>)</u>												
STRAFFORD	actual	3.60	3.02	1.59	3.94	9.98	3.39	3.14	7.11	2.44	4.34	4.91	4.41
	normal	3.12	3.12	3.12	4.02	4.39	3.88	3.77	3.75	3.69	3.77	4.39	4.71
	deviation	0.48	-0.10	-1.53	-0.08	5.59	-0.49	-0.63	3.36	-1.25	0.57	0.52	-0.30
ROCKINGHAM	actual	2.84	2.94	1.54	4.37	8.92	3.95	3.33	5.15	1.47	2.88	4.42	3.77
	normal	3.32	3.32	3.32	3.86	4.12	3.69	3.68	3.59	3.55	3.76	4.20	4.42
	deviation	-0.48	-0.38	-1.78	0.51	4.80	0.26	-0.35	1.56	-2.08	-0.88	0.22	-0.65
Average	actual	3.22	2.98	1.57	4.16	9.45	3.67	3.24	6.13	1.96	3.61	4.67	4.09
	normal	3.22	3.22	3.22	3.94	4.26	3.79	3.73	3.67	3.62	3.77	4.30	4.57
	deviation	0.00	-0.24	-1.66	0.22	5.20	-0.12	-0.49	2.46	-1.67	-0.16	0.37	-0.48
Southern Interior													
HILLSBOROUGH	H actual	2.59	3.08	1.54	4.17	8.09	3.96	3.18	5.33	0.93	3.30	4.36	3.32
	normal	3.60	3.60	3.60	3.88	3.89	3.81	3.75	3.75	3.78	3.67	4.16	4.18
	deviation	-1.01	-0.52	-2.06	0.29	4.20	0.15	-0.57	1.58	-2.85	-0.37	0.20	-0.86
MERRIMACK	actual	3.79	2.93	1.45	3.95	8.53	3.59	2.68	4.83	1.71	3.33	4.59	3.80
	normal	3.16	3.16	3.16	3.51	3.66	3.84	3.66	3.81	3.78	3.52	3.97	3.97
	deviation	0.63	-0.23	-1.71	0.44	4.87	-0.25	-0.98	1.02	-2.07	-0.19	0.62	-0.17
BELKNAP	actual	3.26	2.04	1.15	2.84	7.49	2.79	2.47	5.40	2.03	3.39	3.82	4.11
	normal	2.92	2.92	2.92	3.42	3.66	3.82	3.79	4.08	3.84	3.55	4.00	3.94
	deviation	0.34	-0.88	-1.77	-0.58	3.83	-1.03	-1.32	1.32	-1.81	-0.16	-0.18	0.17
Average	actual	3.21	2.68	1.38	3.65	8.04	3.45	2.78	5.19	1.56	3.34	4.26	3.74
	normal	3.23	3.23	3.23	3.60	3.74	3.82	3.73	3.88	3.80	3.58	4.04	4.03
	deviation	-0.01	-0.54	-1.85	0.05	4.30	-0.38	-0.96	1.31	-2.24	-0.24	0.21	-0.29
South Western													
CHESHIRE	actual	2.39	2.91	1.22	2.77	5.49	2.66	2.94	4.49	1.52	3.20	4.17	3.34
	normal	3.28	3.28	3.28	3.60	3.64	3.97	3.81	4.03	4.05	3.57	3.82	3.80
	deviation	-0.89	-0.37	-2.06	-0.83	1.85	-1.31	-0.87	0.46	-2.53	-0.37	0.35	-0.46
SULLIVAN	actual	2.87	3.24	1.64	2.94	6.23	3.02	3.29	5.50	1.77	3.09	5.23	3.58
	normal	3.12	3.12	3.12	3.33	3.52	3.90	3.75	4.00	3.93	3.63	3.87	3.67
	deviation	-0.25	0.12	-1.48	-0.39	2.71	-0.88	-0.46	1.50	-2.16	-0.54	1.36	-0.09
Average	actual	2.63	3.08	1.43	2.86	5.86	2.84	3.12	5.00	1.65	3.15	4.70	3.46
_	normal	3.20	3.20	3.20	3.47	3.58	3.94	3.78	4.02	3.99	3.60	3.85	3.74
	deviation	-0.57	-0.13	-1.77	-0.61	2.28	-1.10	-0.67	0.98	-2.35	-0.46	0.86	-0.28
White Mountain													
GRAFTON	actual	3.68	2.55	2.18	3.29	5.13	3.24	3.08	5.67	3.41	3.69	5.60	4.47
	normal	2.92	2.92	2.92	3.60	3.73	4.01	4.26	4.34	4.42	4.05	4.19	4.21
	deviation	0.76	-0.37	-0.74	-0.31	1.40	-0.77	-1.18	1.33	-1.01	-0.36	1.41	0.26
CARROLL	actual	3.30	2.31	1.58	2.86	8.10	3.24	3.23	6.35	3.15	3.18	4.82	5.35
	normal	3.00	3.00	3.00	4.01	4.05	4.19	4.14	4.25	4.21	3.88	4.37	4.33
	deviation	0.30	-0.69	-1.42	-1.15	4.05	-0.95	-0.91	2.10	-1.06	-0.70	0.45	1.02
Average	actual	3.49	2.43	1.88	3.08	6.62	3.24	3.16	6.01	3.28	3.44	5.21	4.91
<u>-</u>	normal	2.96	2.96	2.96	3.81	3.89	4.10	4.20	4.30	4.32	3.97	4.28	4.27
	deviation	0.53	-0.53	-1.08	-0.73	2.73	-0.86	-1.05	1.72	-1.04	-0.53	0.93	0.64
North Country													
COOS	actual	3.93	3.17	2.58	3.63	6.58	4.25	3.50	4.63	4.88	3.30	5.26	5.46
	normal	2.72	2.72	2.72	3.57	3.61	4.14	4.61	4.53	4.70	4.25	4.13	4.24
	deviation	1.21	0.45	-0.14	0.06	2.97	0.11	-1.11	0.10	0.18	-0.95	1.13	1.22

Source: Northeast River Forecast Center, NH DES Dam Bureau

LAMPREY RIVER near NEWMARKET NH Gage# 01073500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



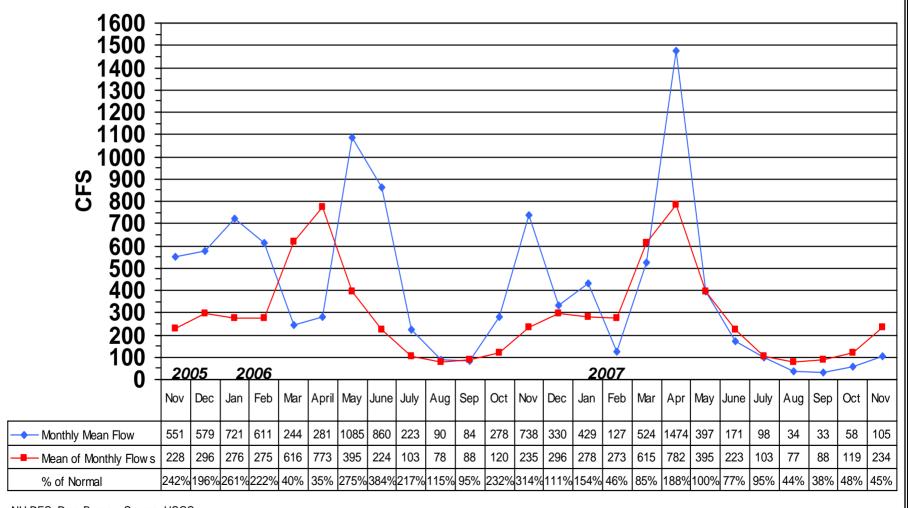
NH DES, Dam Bureau, Source: USGS

Start of record 1934

SOUHEGAN RIVER at MERRIMACK NH Gage# 01094000



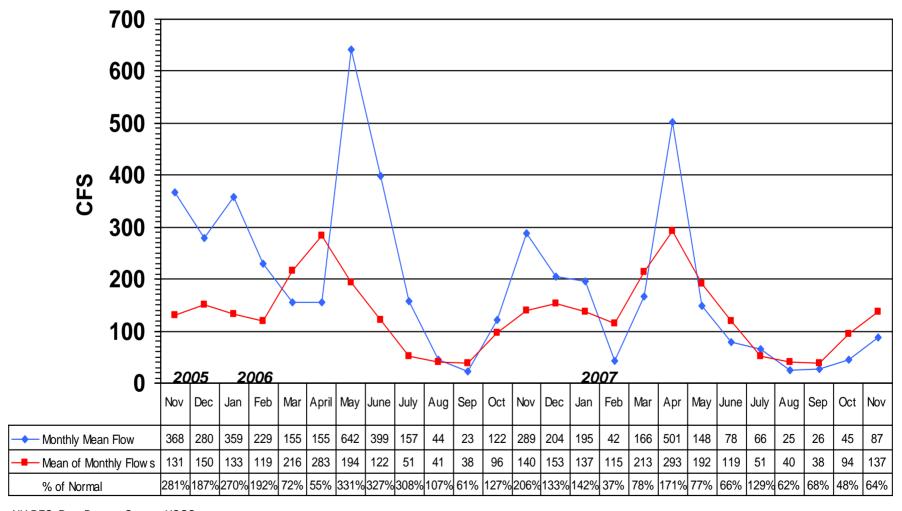
MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



SOUCOOK RIVER at PEMBROKE ROAD near CONCORD NH, Gage# 01089100



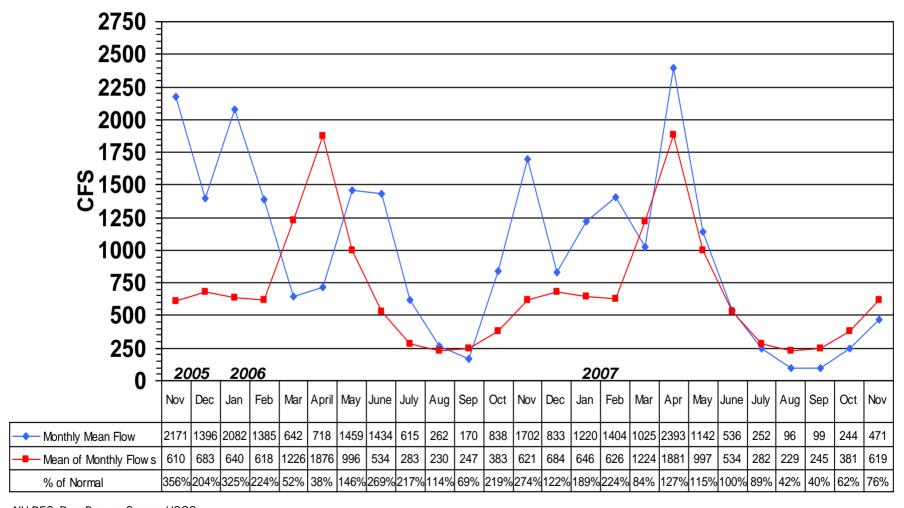
MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



ASHUELOT RIVER at HINSDALE NH Gage# 01161000



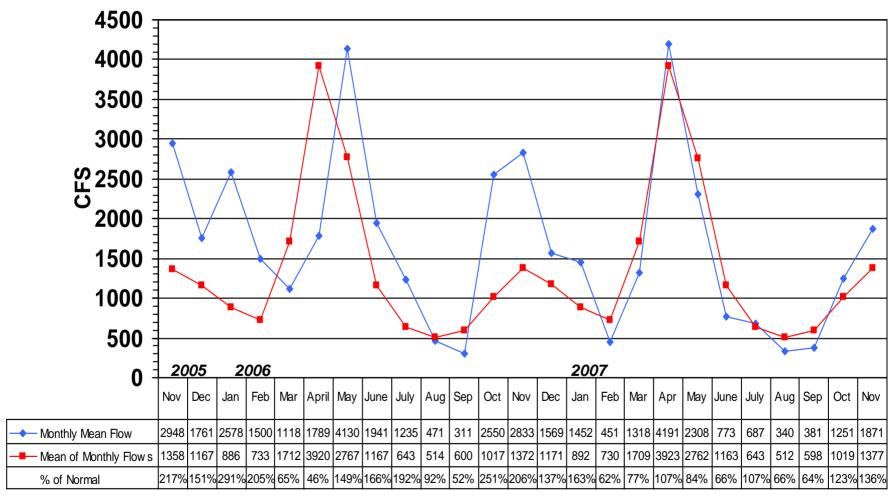
MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



PEMIGEWASSET RIVER at PLYMOUTH NH Gage# 01076500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



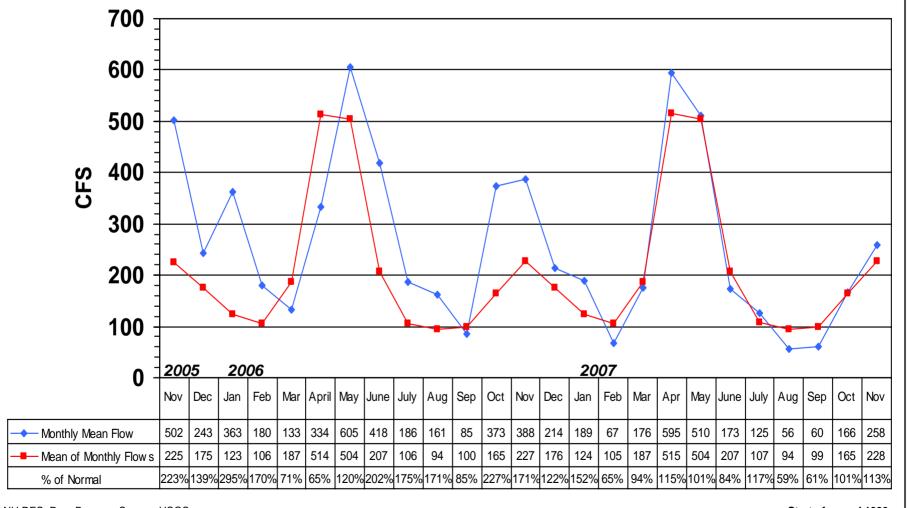
NH DES, Dam Bureau, Source: USGS

AMMONOOSUC RIVER at BETHLEHEM JUNCTION NH Gage# 01137500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

This station replaces gage# 01137000 which was discontinued by DES at the end of Sept 2004



NH DES, Dam Bureau, Source: USGS

Start of record 1939

STREAMFLOW DATA FOR SELECTED NH STATIONS AS OF DECEMBER 11, 2007



Station		Est. Mean	Long Term	99%	7Q10	Lowest Period of Record	% of	Below 0.99	Below 7Q10	Below Record
number	Station name	Flow (cfs)	Median Flow	Flow (cfs)	Flow (cfs)	Daily Flow (cfs)	Median		Flow?	Flow?
Androscoggin Riv	er Basin									
	d River near Wentworth Location, NH	Ice	176	22	16	6.8	#VALUE!	#VALUE!	#VALUE!	#VALUE!
	coggin River at Errol, NH	1,710	1,520	500	451	0	113%	FALSE	FALSE	FALSE
01054000 Androso	coggin River near Gorham, NH	1,830	2,000	1300	1310	795	92%	FALSE	FALSE	FALSE
Saco River Basin										
	iver near Conway, NH	Ice	530	105	97	66			#VALUE!	
01064801 BEARC	AMP RIVER AT SOUTH TAMWORTH, NH	Ice	100	6	4.8	4.5	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Piscataqua River I										
	CO RIVER NEAR ROCHESTER, NH	85	105			2.2	81%		#VALUE!	
01073500 LAMPR	EY RIVER NEAR NEWMARKET, NH	124	253	7	5		49%	FALSE	FALSE	#VALUE!
Merrimack River B										
	BRANCH PEMIGEWASSET RIVER AT LINCOLN, NH	222	240		49	46	93%	FALSE	FALSE	FALSE
	EWASSET RIVER AT WOODSTOCK, NH	Ice	304		56			#VALUE!		
	RIVER NEAR RUMNEY, NH	Ice	145		15			#VALUE!		
	EWASSET RIVER AT PLYMOUTH, NH	Ice	830		118	45			#VALUE!	
	RIVER NEAR BRISTOL, NH	Ice	95		6.2	2.7			#VALUE!	
	PESAUKEE RIVER AT TILTON, NH	380	579		136	48	66%	FALSE	FALSE	FALSE
	MACK RIVER AT FRANKLIN JUNCTION, NH	1,720	1,880		551		91%		FALSE	
	OOCOOK RIVER AT PETERBOROUGH, NH	126	96		6.3		131%	FALSE	FALSE	
	OOCOOK RIVER NEAR HENNIKER, NH	326			37		700/	FALSE	FALSE	
	DOCOOK R BL HOPKINTON DAM AT W HOPKINTON, NH	544	685		39		79%	FALSE	FALSE	
	ER RIVER AT DAVISVILLE, NH	95	178		5.3		53%	FALSE	FALSE	
	WATER RIVER NEAR WEBSTER, NH	133			13.7			FALSE	FALSE	
	TAQUOG RIVER BL EVERETT DAM, NR E WEARE, NH	40			1.2			FALSE	FALSE	
	TAQUOG RIVER NEAR GOFFSTOWN, NH	88			8.8		000/	FALSE	FALSE	
	MACK R NR GOFFS FALLS, BELOW MANCHESTER, NH	2,990	4,420		644	98*	68%	541.0F	FALSE	
01094000 SOUHE	GAN RIVER AT MERRIMACK, NH	64	180		12.9		36%	FALSE	FALSE	
Connecticut River		876	729		40	30	120%	FALSE	FALSE	FALSE
	ECTICUT R BELOW INDIAN STREAM NR PITTSBURG, NH	Ice			42 176	108			#VALUE!	
	ECTICUT RIVER AT NORTH STRATFORD, NH ECTICUT RIVER NEAR DALTON, NH	Ice	1,340 2,170		389	115			#VALUE!	
	NOOSUC RIVER AT BETHLEHEM JUNCTION, NH	Ice	130		28	21			#VALUE!	
						152*	93%	#VALUE!	FALSE	#VALUE!
	ECTICUT RIVER AT WELLS RIVER, VT ECTICUT RIVER AT WEST LEBANON, NH	3,940 9,920	4,230 5,850	380*	690 902	82*	93% 170%		FALSE	
	R RIVER AT WEST CLAREMONT, NH		237	40	38	14		#\/^	#VALUE!	#\/^ =
	ECTICUT RIVER AT NORTH WALPOLE, NH	Ice 9,510	8,350	260*	1058	115*	#VALUE!	#VALUE!	FALSE	#VALUE!
	LOT RIVER AT NORTH WALPOLE, NH	9,510	8,350 145	∠60 4.5	2.7	0.4	71%	FALSE	FALSE	FALSE
	BROOK BELOW OTTER BROOK DAM, NEAR KEENE, NH	38	61	4.5 1.6	1.1	0.3	62%	FALSE	FALSE	FALSE
	LOT RIVER AT WEST SWANZEY, NH	322	421	32	1.1 	0.3 	76%	FALSE	FALSE	PALSE
UTTOUSSU ASHUE	LOI NIVEN AT WEST SWANZET, NO	322	421	32			1070	FALSE		

^{*}Flow duration and record low mean daily flow significantly affected by reservoir operations

Source: USGS, NH DES

SUMMARY	Below	Below	Below
	0.99	7Q10	Record
	Flow?	Flow?	Flow?
FALSE =	17	21	8
TRUE =	0	0	0

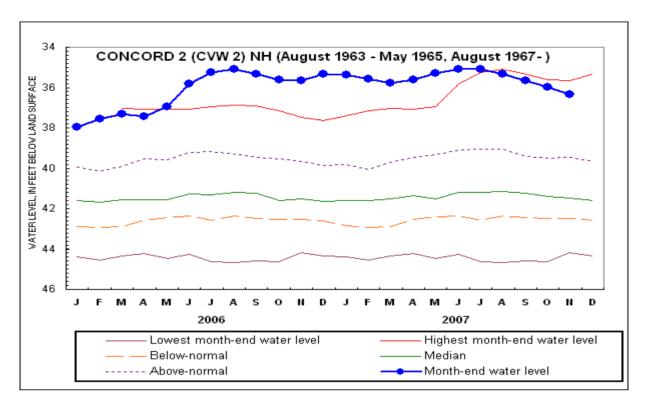
^{**}Estimated

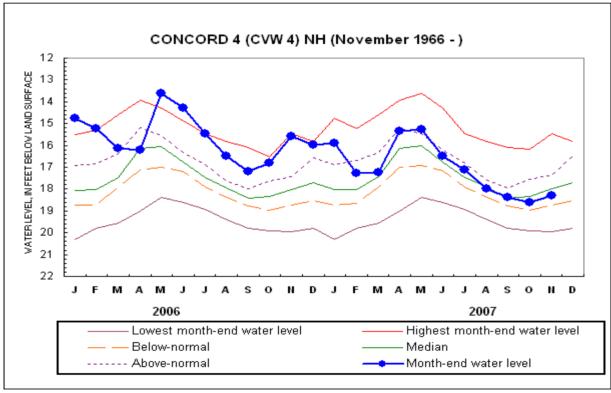
New Hampshire Groundwater Levels for November 2007

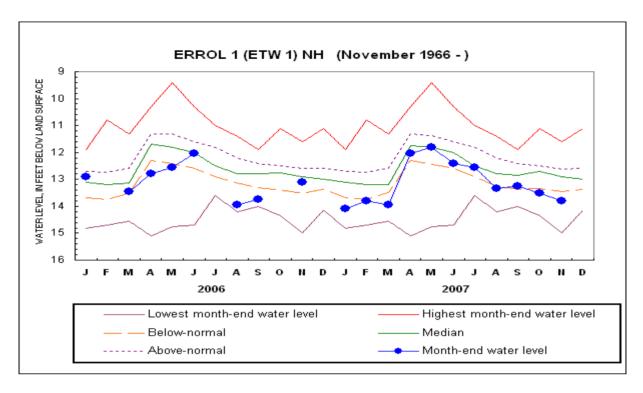


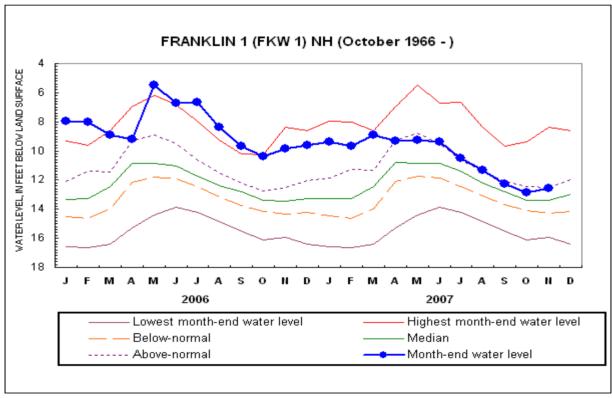
	START OF	WATER LEVEL BELOW	NET CHANGE	NET CHANGE			DEPARTURE FROM	PERCENT OF	
<u>WELL</u>	RECORD	SURFACE DATUM (ft)	IN ONE MONTH (ft)	IN ONE YEAR (ft)	<u>MEDIAN</u>	RANGE (ft)	MONTHLY MEDIAN (FT)	RANGE	<u>STATUS</u>
ALBANY 14	1995	5.92	1.29	-2.02	5.97	2.07	0.05	2.4	NORMAL
ALBANY 15	1995	7.97	1.1	-3.04	7.93	1.27	-0.04	-3.1	NORMAL
BARNSTEAD 10	1995	2.40	0.58	-0.03	2.8	0.45	0.4	88.9	ABOVE NORMAL
CAMPTON 34	1988	12.33	1.22	-1.3	12.6	1.82	0.27	14.8	NORMAL
	1995	7.27	0.45	-0.23	7.61	1.72	0.34	19.8	ABOVE NORMAL
CONCORD 2	1963	36.35	-0.37	-0.71	41.49	5.85	5.14	87.9	ABOVE NORMAL
CONCORD 4	1966	18.28	0.34	-2.71	17.99	1.98	-0.29	-14.6	NORMAL
DEERFIELD 46	1984	39.34	-0.12	-1.2	39.14	0.5	-0.2	-40	NORMAL
ENFIELD 30	1990	5.49	2.09	-3.8	7.59	6.6	2.1	31.8	NORMAL
ERROL 1	1966	13.8	-0.3	-0.7	12.9	2.1	-0.9	-43.1	BELOW NORMAL
FRANKLIN 1	1966	12.56	0.29	-2.74	13.38	5.03	0.82	16.3	NORMAL
GREENFIELD 75	1995	61.21	-0.74	-1.24	62.6	2.64	1.39	52.7	NORMAL
HOOKSETT 5	1965	49.86	0.52	-2.64	49.06	2.22	-0.8	-36	NORMAL
KEENE 2	1963	2.57	0.54	0.32	2.95	2.45	0.38	15.5	NORMAL
LANCASTER 1	1966	1.40	0.7	0.3	1,7	0.86	0.3	34.9	NORMAL
LEE 1	1953	30.63	0.46	-1.18	31.11	1.66	0.48	28.9	ABOVE NORMAL
LISBON 19	1990	13.24	-0.2	-0.35	13.8	2.17	0.56	25.8	NORMAL
NASHUA 218	1964	28.35	0.32	-1.55	28.4	1.78	0.05	2.8	NORMAL
NEW DURHAM 53	1986	19.16	0.61	-0.88	19.06	1.42	-0.1	-7	NORMAL
NEW LONDON 1	1947	9.35	3.01	-5.35	11.81	8.03	2.46	30.6	NORMAL
NEWPORT 3	1995	6.28	0.87	-2	6.01	1.36	-0.27	-19.9	NORMAL
NEWPORT 6	1995	6.25	1	-1.87	6.09	1.37	-0.16	-11.7	NORMAL
OSSIPEE 38	1995	35.60	0.07	-1.07	35.74	2.33	0.14	6	NORMAL
SHELBURNE 2	1995	5.02	0.72	-1.56	4.4	0.86	-0.62	-72.1	BELOW NORMAL
	1965	31.27	0.08	-1.83	31,41	3.66	0.14	3.8	NORMAL

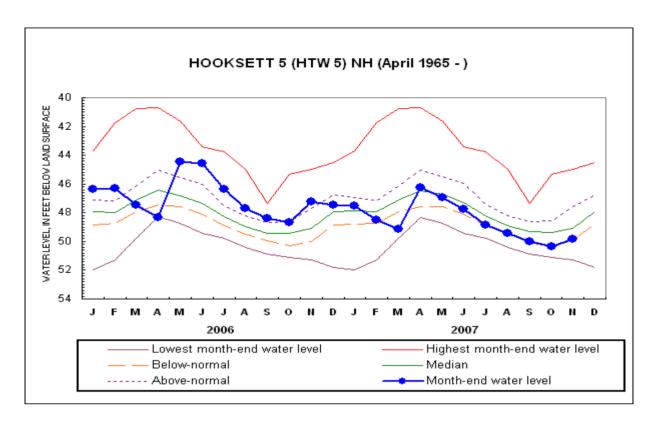
Source: USGS, NH DES

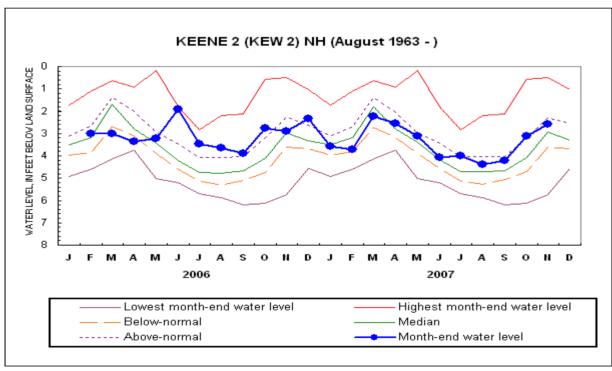


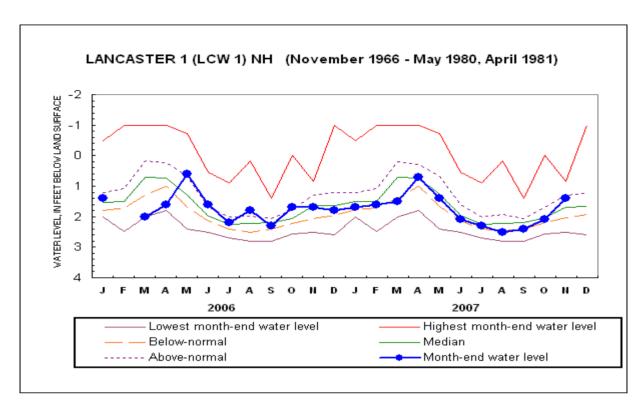


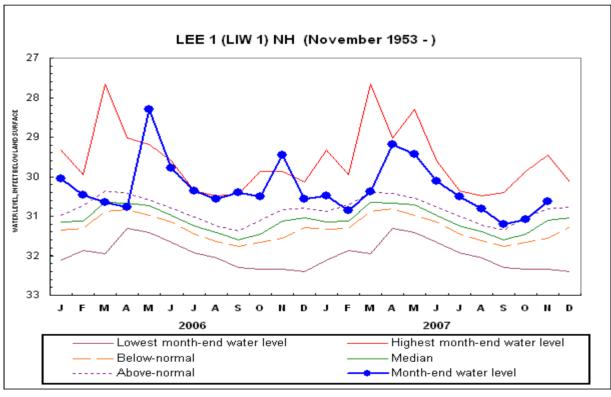


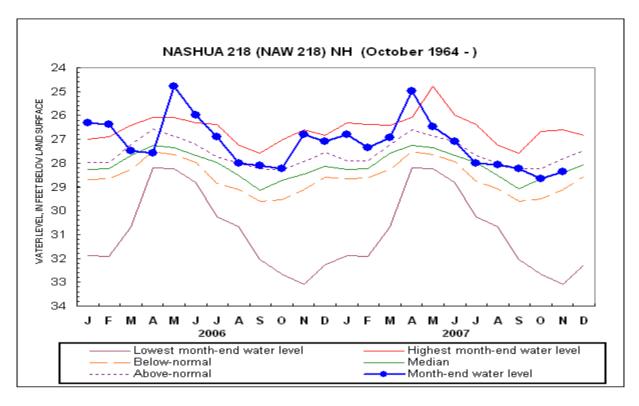


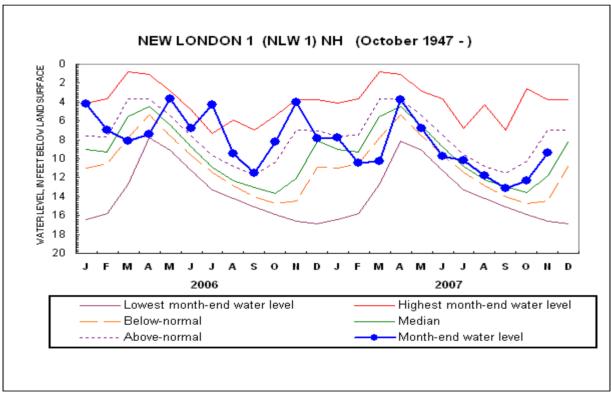


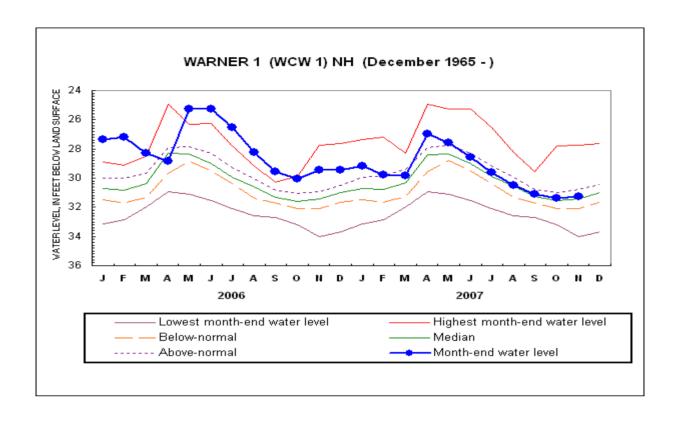






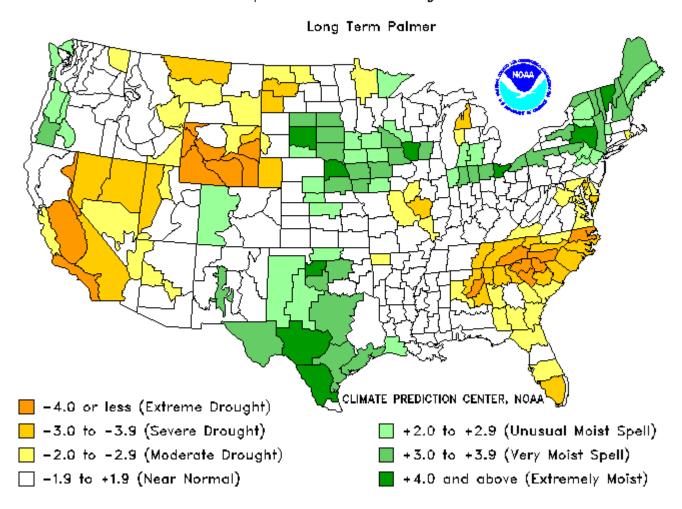






Drought Severity Index by Division

Weekly Value for Period Ending 1 DEC 2007

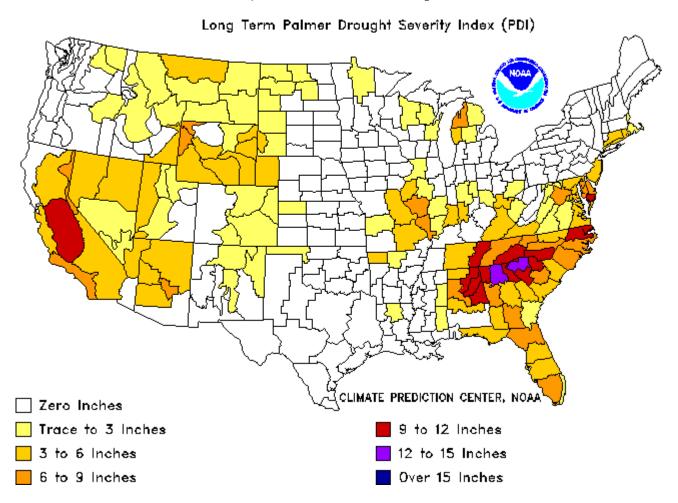


THE PALMER DROUGHT SEVERITY INDEX

The Palmer Index uses temperature and rainfall information in a formula to determine dryness. The advantage of the Palmer Index is that it is standardized to local climate.

Additional Precip. Needed (In.) to Bring PDI to -0.5

Weekly Value for Period Ending 1 DEC 2007



This is the amount of rainfall required in a week's time to bring the index back to zero inches required.